

# naturalLiving

Fall/Winter

your home. your world.

## From the Hearth

Discover the warmth,  
comfort and charm of  
natural gas fireplaces

See the Newest  
Natural Gas Stoves

Great Recipes for  
Cooking with Gas

presented  
to you  
by





## FEATURES

**08 From the Hearth**  
Find out how natural gas fireplaces, stoves and logsets can add warmth and comfort to your home.

**12 Now You're Cooking!**  
Discover the benefits of cooking with natural gas — and see some of the latest ranges from a variety of manufacturers.

## In Every Issue

**03 a natural fit**  
Learn how high-efficiency heaters and boilers can translate into big savings.

**04 natural choices**  
Want to reduce your utility bills? Find out how radiant floor heaters, snow-melt systems and blue-flame space heaters can help. Plus, what you should know about water heaters and backup generators.

**07 naturally better**  
Learn how desiccants can improve air quality and help your family breathe easier.

**16 naturally good**  
Try these surprisingly simple recipes for great-tasting food cooked over natural gas.

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# a natural fit The Heat Is On!

Discover how the right gas-fired heating equipment can keep temperatures higher and translate into big savings. **By Amy E. Lemen**

**W**ant to turn this winter into a cozy, lower-cost season for your family? Installing a high-efficiency or condensing natural gas furnace can help make it happen.

"Condensing units have been around more than 10 years, and each year they take a bigger share of the market," says Glenn Pottberg, national sales manager at ThermoProducts, a manufacturer of high-efficiency furnaces. "Whether they're replacing old units or installing new, more homeowners want higher-efficiency models."

The term *furnace* is used to describe a whole-house heating system that heats a space. A *heater*, on the other hand, heats a room or specific area by burning natural gas or propane; a flame heats the air, which then heats the room. *Boilers*, on the other hand, heat water, not air, then circulate that hot water through plastic tubing, baseboards or radiators (see "Boiler Basics," at right).

Most whole-house heating systems are gas-fired and can be divided into two classes: mid-efficiency and high-efficiency. Mid-efficiency models are about 82 percent efficient; that is, of 100 BTUs (British Thermal Units, a measure of heat), 82 end up being usable heat. High-efficiency or condensing units include those with more than 90 percent efficiency, so for those same 100 BTUs, 90 are used and only 10 are lost. Given those kinds of numbers, the savings difference can be significant.

The Consortium for Energy Efficiency — a nonprofit organization that promotes the manufacture and purchase of energy-efficient products — estimates that homeowners can save up to 15 percent on energy bills with a qualifying furnace and 10 percent with a high-efficiency boiler, when compared to standard-efficiency units.

"If a homeowner has a furnace that's 15 or 20 years old, it's probably much less efficient than even a mid-efficiency model," says Pottberg. "If they've got a 60 percent efficient model and they replace it with a 90 percent efficient unit, it'll pay for itself in four or five years."

## Determining Efficiency

The U.S. Department of Energy sets efficiency standards — known as the Annual Fuel Utilization Efficiency, or AFUE — for all boilers and furnaces. The current minimum AFUE is 78 percent. The AFUE rating can be found on the yellow Energy Guide label on each piece of equipment.

The most efficient heating units are called condensing.

In mid-efficiency units, the gas is burned off via what's called a heat exchanger, which then moves it through ductwork and a blower to heat your house. In high-efficiency units, gas goes through not one but two heat exchangers, where the secondary exchanger can extract even more heat from the gas it's burning.

The reason these furnaces are called "condensing" units is because they're so efficient that condensation forms inside the second heat exchanger. The solution is an inside drain that moves the moisture safely away, usually outside the house. "The industry has been able to get to 95 efficient percent with these, where years ago it was only 78 to 80 percent," Pottberg says. "Higher efficiency units use less fuel and cost less to operate." ■

## Boiler Basics

**Need closet space? New energy-efficient boilers are hot — and much smaller.**

Just as energy-efficiency has translated to heaters, there are more choices for homeowners when it comes to boilers. Perhaps the biggest development is the materials used. Most boilers are made from cast iron; the most energy-efficient ones, however, are constructed from cast aluminum, which means a boost in energy efficiency from 87 percent with cast iron to 90 percent with aluminum.

That might not seem like much, but it will likely make a difference over years of energy bills — and it looks cool too. Known as "modulating/condensing," or "mod/con" products, these super boilers not only take care of energy-efficient heat transfer, they're also a lot smaller, which means your boiler isn't taking up that closet you wanted to use as hobby storage.

"You can do a lot more in a smaller space with these," says Ken Niemi of Burnham Hydronics, a manufacturer of several new mod/con boiler products. "Beyond energy efficiency, customers are looking for smaller size and aesthetics."



The latest high-efficiency boilers are sleeker and smaller than in the past, meaning homeowners don't necessarily need utility rooms to hide unsightly equipment. Photo courtesy of Burnham.

# Heating and Power Options for Your Home

**Want to reduce your utility bills? Find out how radiant floor heaters, snow-melt systems, blue-flame space heaters, water heaters and backup generators can help.** By Amy E. Lemen

There's an incredible variety of money-saving products to choose from when it comes to home heating and power options. Whether you're looking for a whole-house heating system, a convenient way to get rid of treacherous ice and snow, an efficient water heater or a system to ensure your family has power in the event of a weather emergency, there are many popular and energy-efficient options.

## Radiant Floor Heating

Wouldn't it be wonderful to feel warmth and comfort throughout your home without air blowing into the room — or without looking at an unsightly radiator? Homeowners are discovering how radiant floor-heating systems — which are all but invisible — can maintain constant temperatures from

room to room, even upstairs.

"As radiant flooring gets less expensive and there are more options and styles, it's really exploding in popularity, even in places like Texas and Florida," says Dan Chiles from Watts Radiant in Springfield, Mo. "It's a dash of color. We encourage people to see it with a designer's eye, because it's getting so much more sophisticated."

It's also a more efficient way to heat an area, or even an entire home. Gas-powered radiant systems consist of tubes installed under a slab, or if you're replacing existing flooring, under the floor. A small circulator, acting as a pump, pushes heated water through the tubes, essentially heating objects in the area and making them warm to the touch. The result is that when you sit down on that normally cold-as-ice-in-winter leather couch to watch a football game, it's actually warm.

"It's a whole different heating philosophy," says Chiles. "You're not trying to heat the room like in a typical forced air system, but the things in it, so it's a much more efficient use of energy."

Instead of using forced air, radiant floors heat objects in the room, spreading warmth throughout and adding a designer touch with a splash of red color. Snow melt systems use the same technology to melt ice off driveways and other slippery surfaces. Photo courtesy of Watts Radiant.



**"Radiant floor heating is a different heating philosophy. You're not trying to heat the room like in a typical forced air system, but the things in it, so it's a much more efficient use of energy."**



The snow-melt system underneath this driveway uses natural gas to heat a water/Glycol or antifreeze mix, which is then pushed through tubing underneath the driveway, easily melting away snow and ice. Photo courtesy of Watts Radiant.

## Snow Melt

The same radiant technology used to heat floors is also used outside — in snow-melt systems that are essential to getting around on those mornings when overnight ice and snow make long driveways treacherous.

"It takes about 30 BTUs per square foot, per hour, to heat the inside of a home," says Chiles. "Outside, you need 300 BTUs per square foot, per hour. In urban and remote areas, it's about safety, and it has definitely become a growth industry, especially with Baby Boomers."

Snow-melt systems can be installed underneath drive-

ways, sidewalks, patios, carports and more — basically anywhere there's a concrete slab. Like radiant floors, they use hydronic (water) heating systems, melting ice and snow by circulating a gas-heated solution (usually antifreeze and water) through tubing underneath. It's about safety, to be sure, but it's also about aesthetics for homeowners whose driveways are decorative or stamped concrete.

"You can't get ice out from between those cracks, and you can't shovel it," says Chiles. "A snow melt system gets rid of ice safely, without the risk of cracking the surface."

## Blue-Flame Space Heaters

Blue-flame space heaters are just what the name suggests: space heaters that give off a sapphire-blue flame, which heats the air around people and objects for atmospheric warmth.

Most have controls on the unit that are simple to operate: Just push a button to ignite the pilot light (no matches needed), and the heater begins to instantly warm the room or area. They're a good option when it doesn't make sense to crank up a whole house heating system, or to add a little extra heating oomph to a room that doesn't get quite as warm as the rest of the house.

Most of the new blue-flame space heaters are vent-free, working much like a central heating system. Because they're ventless, each unit is required to include an oxygen-depletion sensor (ODS) that shuts the unit off if there isn't enough fresh air to avoid the danger of carbon monoxide poisoning. According to the Vent-Free Gas Products Alliance, all U.S. gas code groups and 49 states, as well as British Columbia, Manitoba, Alberta and Saskatchewan, allow the sale and installation of vent-free appliances.

"Homeowners throughout the United States are discov-



Most new blue-flame space heaters are vent-free and feature sensors that shut off the unit if there isn't enough fresh air, thus preventing the risk of carbon monoxide poisoning.

ering that vent-free gas appliances are a smart and economical answer for safe supplemental heating," says Sue Walker, chairman of the Vent-Free Gas Products Alliance. "Manufacturers are investing more than ever in cutting-edge designs and technological breakthroughs that are exceeding consumer expectations."

Finally, keep in mind that older gas-fired space heaters may not have the ODS mechanism, so before you settle in for a chilly winter, be sure you have a newer model.

## Water Heaters

Today's water heaters have more features and options than ever, which translates into more choices for homeowners.

There are two types of water heating systems: the most common is a conventional tank system, which stores and heats water in a tank until needed; and a continuous or tankless water heating system, which has a higher efficiency rating than any other conventional residential water heating system. "Tankless is about 25 to 28 percent more efficient, and people love them because you never run out of hot water," says Butch Aikens, resource manager for Rheem, which makes tank and tankless models. "They cost more, but for most people, it's about the features and benefits they get with it."

When selecting a water heater, consider the first hour rating (FHR) to properly size a storage water heater or select the model of a tankless unit. The FHR is the amount of hot water the water heater can supply in the first hour of operation. It's a

combined measurement of how much water is stored in the water heater and how quickly the water heater can heat cold water to the desired temperature. Use this rating to compare hot water delivery capabilities of similar models and determine the best unit for your household. For example, a Maytag 40-gallon electric water heater has an FHR of 50 gallons at 3800 watts, or 58 gallons at 5500 watts. A comparable Maytag gas water heater has an FHR of 73 gallons for a power vent model and 81 gallons for a standard model.

Look for the EnergyGuide Label, which lists the first hour rating in the top left corner as "Capacity." Finally, think about how long it will take for the water heater to recover and be ready for the next shower should it run out of hot water.

A water heater's energy efficiency (its Energy Factor, or EF) depends on how quickly the energy source (gas or electric) heats the water, how much energy is lost when the water heater is idle, and energy lost as the unit cycles on and off.

Photo courtesy of Bradford White.



## Backup Generators

Given the volatile weather of the past five years, it's not surprising that the sale of backup power generators to homeowners has increased. In fact, a 2006 study found that half of those who lived in hurricane-prone states (essentially the entire Gulf Coast — about nine million households) expected to lose power at least once during each hurricane season.

Add to that the power loss from downed power lines during snowstorms, ice storms and tornados, and you're looking at a

power-loss scenario that many homeowners are eager to avoid. "We've definitely seen an increase in demand, especially as the cost has come down in recent years and generators have become more affordable," says Troy Blewett of Briggs & Stratton. "Pricing now is about \$3,000 to \$5,000 without installation. That's worth it to many people."

Today's backup generators are often called standby generators, because they're literally "standing by" when your main power goes out, turning on automatically when you need it. Smaller, portable units are also available, which run on gas and are often used by campers, homeowners and contractors who need an extra source of power for recreation or work, but it's the installed units that most homeowners want.

"The demand for standby units has really started to kick in over the past five years," says Blewett. "Even in new construction, they're starting to become a regular part of the home, just like an air conditioning unit." ■

Suppliers report surging sales of compact, efficient backup ("standby") generators, which help homeowners stay powered during outages. Photo courtesy of Briggs & Stratton.



# naturally better The Air Inside Your Home

## Learn how desiccants can improve air quality and help your family breathe easier.

By Amy E. Lemen

You're home after a long day. Time to relax and breathe a little easier. Or not. Truth be told, the air inside your home is probably worse than it is outside, smog and allergens included. The Environmental Protection Agency (EPA) has estimated that indoor air is up to 10 times worse than the air we breathe outside. Given those kinds of statistics, homeowners nationwide are more interested than ever in breathing easier. The good news is that more manufacturers and building suppliers are designing products that can help us all take a deep, healthy breath.

Take desiccants, for example. That's what's in those little packets found in everything from pill bottles to pillowcases — essentially, minerals like silica gel, calcium sulfate and other substances that act as natural dehumidifiers, removing moisture from the air, pills or even pillowcases. Ever seen rice inside salt shakers at restaurants? Rice is a "low-tech" desiccant, and it's there to make sure that moisture doesn't make the salt clump when you're trying to shake it on French fries. When used as part of your home's heating and air conditioning system, desiccants help remove moisture in the air, improving your home's indoor air quality.

"A desiccant unit can take a house's relative humidity down to 45 to 50 percent, helping homeowners avoid a whole host of pathogens," says Scott Janke of Novelaire, the only manufacturer of residential gas-fired desiccant systems. "Indoor air quality has always been a big issue, and this alleviates a lot of the problems."

ASHRE, a nationally recognized engineering association, states that the optimum humidity level for controlling, bacteria, viruses and dust mites is between 40 and 60 percent. Living in a house with just 50 percent relative humidity means living in a home where health and allergy issues related to mold and dust mites are dramatically decreased. That's because mold can't grow in homes with 50 percent humidity, and dust mites can't reproduce (it's their waste that triggers allergy problems). "People tend to crank up the air conditioner when it's hot and sticky in the house," Janke says. "You don't have to do that with a desiccant system because it controls the humidity."

If you live in a high humidity area, then you understand and probably detest that sticky, clammy feeling. High humidity causes us to feel hotter, so we lower the temperature on our air conditioner and then we get cold — so we start the up-down thermostat war. Less relative humidity means the house stays drier, your air conditioner doesn't have to work as hard, and everyone breathes easier. A desiccant system operates independent of your home's AC system, so it operates only when the moisture level in your home goes over the unit's setting. "Homeowners

end up feeling comfortable at higher temperatures, and that can save money on energy bills," says Janke.

Contact your local natural gas company or a heating and air conditioning contractor to discuss the installation of a desiccant unit in your home. ■

## 10 Top Ways to Improve Indoor Air Quality

Whether you decide to invest in a desiccant system now or later (prices range from \$4,000 to \$5,000, installed), take these steps now for healthier air in your home.

1. Vent bathrooms, kitchens, toilets and laundry rooms directly outdoors, and use energy-efficient and quiet fans.
2. Avoid locating furnaces, air conditioners and ductwork in garages or other spaces where they could draw contaminants into the house.
3. Properly vent fireplaces, wood stoves and other hearth products, and use tight doors and outdoor air intakes wherever possible.
4. Vent clothes dryers and central vacuum cleaners directly outdoors.
5. Store toxic or volatile compounds, such as paints, solvents, cleaners and pesticides, outside livable spaces.
6. Minimize or avoid unvented combustion sources such as indoor barbecues.
7. Open windows when you're using strong chemical products, such as home cleaning products and paint.
8. Use sealed-combustion, power-vented or condensing water heaters and furnaces. If you're using natural-draft applications, be sure they've been tested for proper venting and, if possible, that they're located outside living spaces.
9. Invest in a good particle filter or air cleaner in your air handling system to keep dirt out of the air and off your ductwork and heating and cooling components.
10. Use whole-house mechanical ventilation to let a minimum level of outdoor air circulate throughout the home.

Source: American Society of Heating, Refrigerating and Air-Conditioning Engineers.

# from the hearth



Traditional areas such as living rooms and bedrooms remain popular, but more homeowners are installing hearth appliances in places where they were unheard of just a few years ago. All photos courtesy of Hearth, Patio & Barbecue Association.

The harnessing of fire has long been heralded as the dawn of humanity for both cooking and heating. Fortunately, modern humans can stay warm with an enticing variety of gas hearth appliances designed to fit their lifestyles. “Gas appliances continue to evolve in terms of versatility and style,” says Leslie Wheeler, director of communications at the Hearth, Patio & Barbecue Association, a trade group for manufacturers, distributors and retailers. “What’s better than turning on a gas log or fireplace with the flip of the switch to have great ambience?”

According to the National Association of Realtors, each fireplace in a home adds 12 percent to the home’s value. Current technology allows the addition of a gas fireplace without a flue, making a fireplace a perfect addition at any time. Gas hearth appliances offer the utility of warming just a room or an area of the home with a wide range of styles to fit into any décor.

“New fireplaces and stoves have a contemporary, modern look that certainly appeals to Gen Xers and Gen Yers — something trendy and more contemporary,” Wheeler says. With the push of a button, the instant dancing flame and heat of gas hearth appliances enchant these consumers.

## Options Abound

Gas hearth appliances include fireplaces, fireplace inserts, gas logs and freestanding gas stoves.

**Modern fireplaces** are engineered as a firebox enclosed within a steel cabinet. Air circulates between the inner and outer boxes, transferring the heat to your room while keeping the outer wall relatively cool. This construction allows installation close to the wood framing in new construction or remodeling. Compared to a site-built fireplace, factory-built systems are inexpensive to purchase and install. They use a safe, lightweight chimney (or no chimney at all) and do not need the additional structural support required for a masonry chimney. They can be easily and safely installed in almost any room.

**Fireplace inserts** are, as the name implies, inserted into an existing masonry or factory-built fireplace to improve efficiency and reduce environmental impact. A fireplace insert is essentially the same as a freestanding stove except it uses an

Today’s wide range of gas hearth appliances will fit your heating needs and decorating tastes. By Matt Bolch

“What’s better than turning on a gas log or fireplace with the flip of the switch to have great ambience?”

The amount of heat output and level of ornateness of appliances can vary widely, so matching a hearth appliance to its intended use is important. Do you want to watch a pretty fire, heat part of your house or both?



## Freestanding Stoves

For increased energy efficiency in your home and the ambience of a cozy fire, a freestanding gas stove is a perfect fit.

A versatile freestanding gas stove can be installed in nearly any room for added warmth on a cold winter’s day, which would allow you to lower the thermostat in the rest of the house. Living rooms, kitchens and other gathering places are especially conducive to the warmth of a freestanding gas stove.

Advanced burner technology has helped manufacturers develop gas stoves that feature large, dancing yellow flames and glowing red embers that closely resemble a wood fire. Intricately molded and hand-painted logs that look like fresh-cut wood also improve this authentic “wood-like” appearance.

In areas that experience power outages during the winter, a freestanding gas stove can give you piece of mind by being able to heat at least part of the house should an outage occur.

Stoves are classified by the way they are vented — top vent, direct vent or vent-free. Within these classifications you can find a wide range of available sizes and heating capabilities. Gas stoves can range from small to extremely large, but choosing a size is based more on the amount of heat the stove needs to generate. One key to selecting the right stove is determining the desired heat level in the rooms that will require heat. A gas stove must be installed a specific distance away from combustible materials such as drapes and doors, but that distance can be as little as four

inches, depending on the type of stove.

If you haven’t visited a hearth retailer recently, you owe it to yourself to check out the wide variety of sizes and styles of freestanding gas stoves. The appliances can be constructed of steel, stone or cast iron, with porcelain enamel finishes and high-temperature paint in an array of colors to match your décor. Available styles include contemporary, colonial, traditional, mission, art deco, early American, French country and many others. Brushed metals and high gloss porcelain enamel in dozens of colors are frequent design elements on gas stoves, while granite, marble or soapstone panels add textural interest.



existing chimney, though a flue liner or other modification may be necessary. Vent-free natural gas and propane fireplace inserts require no chimney or flue modification.

**Manufactured gas log sets** can be installed into existing fireplaces with few modifications except the addition of a gas line. Log sets are a popular way to upgrade wood-burning fireplaces so homeowners don’t have to purchase wood, store it, scoop out ash and try to coax a fire out of reluctant logs on a cold day. Gas logs — which realistically mimic a wood flame and glowing embers — are designed to mimic actual wood and are available in many varieties, including oak, birch, manzanita, pine, and walnut.

Gas stoves, fireplaces, fireplace inserts and log sets offer a wide range of control options, including manual controls, remotes, wall thermostats and remote thermostats. Most offer blowers to help circulate the heat more efficiently. Gas inserts and log sets can provide an alternative to existing wood-burning fireplaces without the hassle of logs. Gas stoves, fireplaces, inserts and log sets can burn either natural gas or propane.

“Owning a gas hearth appliance isn’t as expensive as homeowners think it is — especially if they have gas on site,” Wheeler says.

### Anytime Installation

Although many gas hearth products are installed in new construction or as part of a remodeling project, that doesn’t have to be the case. Depending on the model you choose, the heat generated and local building codes, gas hearth appliances are appropriate for every room in the house — even bathrooms and kitchens. Be sure to have an experienced hearth installer put in your gas log set or fireplace.

If you’re thinking of adding hearth appliances as part of new

Freestanding stoves are the most versatile hearth product and are available in a wide variety of sizes, colors and styles for diverse decorating tastes. Stoves heat quickly, and many feature ceramic glass viewing areas to offer a glimpse of flames.



home construction or remodeling, your architect or builder can help you determine the best location in each room for an appliance. A specialty hearth retailer is your best resource to show you the variety of products available, discuss your heating needs and help you make the best choice based on your appliance preferences, decorating goals and budget.

Before actually purchasing a hearth appliance, you should assess your needs and do a little homework to narrow your choices. In addition to a building professional or specialty retailer, you can find a wealth of ideas on the Internet or in the fall/winter issues of home and lifestyle magazines.

The first consideration should be where an appliance will be located. Another factor should be how the unit will be used. Operating and mainte-

nance costs also should be factored into your hearth appliance purchasing decision. Ultimately, though, adding to the beauty, comfort, style and value of your home begins with the selection of a new gas hearth appliance. ■

### For Additional Information

- Buck Stove Corp. . . . . [www.buckstovecorp.com](http://www.buckstovecorp.com)
- Fireplace Products Intl. Ltd. . . . . [www.regency-fire.com](http://www.regency-fire.com)
- Gas Products Co. Inc. . . . . [www.gasproductscompany.com](http://www.gasproductscompany.com)
- Harman Stove Co. . . . . [www.harmanstoves.com](http://www.harmanstoves.com)
- Heat-N-Glo . . . . . [www.heatnglo.com](http://www.heatnglo.com)
- Lennox . . . . . [www.lennoxhearthproducts.com](http://www.lennoxhearthproducts.com)
- Napoleon Fireplaces . . . . . [www.napoleonfireplaces.com](http://www.napoleonfireplaces.com)
- Robert H. Peterson Co. . . . . [www.rhpeterson.com](http://www.rhpeterson.com)
- Temco Fireplace Prod. . . . . [www.temcofireplaces.com](http://www.temcofireplaces.com)
- Vermont Castings, Majestic Products . . . . . [www.majesticproducts.com](http://www.majesticproducts.com)

# Now You're Cooking!



Gas ovens preheat faster than electric ovens and reach baking temperature faster without using the broiler. Photo courtesy of Maytag.

Since nine out of 10 chefs cook on a gas range, shouldn't you? From professional chefs to Wolfgang Puck and Rachael Ray wanna-be's, culinary craftsmen prefer the precise, incremental control that natural gas provides. In fact, upwards of 80 percent of food preparation involves range burners. Gas burners heat quickly and easily maintain their temperature, whereas the eye of an electric range cycles on and off to maintain temperature. Cooks can raise and lower the heat settings on both types of burners, but only gas burners allow the cook to see the flame move in response to his actions.

"Even when using the oven for cooking, much of preparation starts on the stovetop," says Sue Bailey, manager of product development for major appliances at Viking Range Corp. "We all like to see that pretty blue flame and know that it's working. Especially when simmering, it's great to tweak the burner and see exactly how high the flame is."

In addition to that ubiquitous flame that provides precise temperature control, cooking with gas offers superior energy efficiency and reliability over an electric range. A typical gas burner can bring water to boiling about three percent faster than a comparable electric burner. Plus if the electricity goes out, you can still cook with a natural gas range. Further, gas ranges offer many great features, including automatic ignition, self cleaning or continuous cleaning and smokeless broiling.

Gas ovens are naturally convective, meaning warm air flows around food during cooking, but some manufacturers have introduced convection gas ovens that bake and broil faster than a conventional gas range. Baking in a gas oven adds moisture to the food; a moist baked chicken dinner or a succulent rib roast entrée is always better when it's prepared in a gas oven. Another advantage of a gas oven

**Gas ranges offer unmatched convenience, precise control and a host of advanced features.** By Matt Bolch

Rangetop options include low-heat burners for precise control, and high-speed burners, which make boiling faster. Photo courtesy of Viking.



**“Rangetop options include sealed burners to keep spilled foods from leaking below the cooktop, and a down-draft ventilating fan built into the cooking surface that vents through a sidewall.”**

is that it preheats faster, which means less time hovering over the oven and wondering if the desired temperature has been reached. And if you often put food in the oven while it's preheating, gas ovens reach baking temperature faster than electric ovens without using the broiler, which could ruin food placed too close to the broiling area.

### Wide Range of Models and Styles

The most common type of gas range features four burners on top of an oven in a single unit, but many other combinations are available to fit the cabinetry of your kitchen, your cooking and baking habits, and your taste. Other possibilities include a double oven, a gas range with overhead microwave oven, slide-in models with unfinished sides that slide between cabinets, drop-in models installed inside base cabinets, separate oven and cooktop that are built into the kitchen, and commercial models with an even wider range of options.

Many homeowners are upgrading to ovens with stainless steel or chrome-plated exteriors, which are durable, stain resistant and easy to clean. However, the finishes of such units can discolor if overheated. Porcelain enamel is the tried-and-true finish, durable and resistant to heat, stains, acids, scratches, fading and yellowing. Baked enamel or electrostatically applied polyester resists chipping better than porcelain enamel, but is less durable, so it can stain and scratch more easily.

Of course, the style and finish of your range is important to the overall look of the kitchen, but advances in cooktop and oven technology have brought advanced products to the market that can speed cooking times, warm at low temperatures and add convenience to the cooking process.

Convection ovens use forced air to cook foods faster at tem-

peratures 25 to 50 degrees below a conventional oven. Cooking times and temperatures on favorite recipes will need to be tweaked to handle convection-oven cooking, but who doesn't want to have dinner or enjoy a treat a little sooner? Because heat from convection ovens enters the cooking box from the top, racks within the oven may need to be lowered.

Low-temperature ovens feature heat ranges as low as 140 degrees to thaw foods and keep prepared dishes hot without drying them out prior to serving.

Programmable ovens allow timed or delayed cooking for chefs on the go. A cold oven can be programmed to heat up at a spec-

ified time, cook for a preset number of minutes and then either shut off or lower the temperature to a warming setting. An in-use oven can be programmed to shut off after a set period of time.

Keeping clean is as important within the oven box as it is in the rest of the kitchen. Ovens are available as either continuous cleaning or self-cleaning. As the name implies, continuous cleaning works at normal baking and broiling temperatures to remove baked-on materials through the addition of catalytic materials into the porcelain enamel coating of the oven walls or liner panels.

Operating the oven at higher temperatures will remove food debris faster. Self-cleaning ovens work during a separate high-

heat cycle that can reach 1,000 degrees, reducing oven debris to a white ash that can be removed with a damp cloth.

### Innovative Options for the Cooktop

Innovations to gas ranges haven't been limited to the oven. Cooktop options can expand a cook's repertoire, give him more control over the cooking process and speed clean-ups. Burners are available with heat output ratings considerably above or below standard. Low-heat burners allow precise control to simmer foods and prepare delicate dishes. On the other end of the scale, high-speed burners make boiling faster and the preparation of foods in extra-large pots and skillets easier.

Other rangetop options include sealed burners to keep spilled foods from leaking below the cooktop and a down-draft ventilating fan built into the cooking surface that vents through a sidewall. This type of rangetop construction is used in models that feature such options as a rotisserie, griddle or extra set of burners.

A gas range is a serious investment, so you should take the time necessary to assess how you cook both on the rangetop and in the oven, then choose a model that matches your cooking style closely. A standard model may be perfect, but a premium oven could save you time and money in the long run by offering a wider range of options. Talk to friends and neighbors about their cooking experiences and how they chose the oven for their kitchen.

Finally, judge purchase costs against operating costs. A higher-priced gas oven may be more efficient than a lower-priced one, which will save you money on operating costs in the long run. Spending a little more upfront actually could pay for itself during the long lifetime of a gas oven.

And remember, the blue flame on the rangetop burner means that you're in control. ■

A typical gas burner can bring water to boiling faster than a comparable electric burner. Photo courtesy of Maytag.



#### For More Information

- Bosch . . . . .www.boschappliances.com
- Fisher & Paykel Appliances Inc. www.fisherpaykel.com
- General Electric . . . . .www.geappliances.com
- Kitchenaid . . . . .www.kitchenaid.com
- Maytag Customer Service . . . . .www.amana.com
- Maytag Customer Service . . . . .www.maytag.com
- Viking Range Corp. . . . .www.vikingrange.com
- Whirlpool . . . . .www.whirlpool.com



## Vegetable Frittata

Yield: 4 servings

### Ingredients:

Peas, thinly sliced carrots, and asparagus sliced on the bias	1/2 cup each
Salt	To taste
Pepper, freshly ground	To taste
Bacon, diced	4 strips
Vegetable oil	As needed
Onion, yellow, diced	1 ea.
Eggs, large	8 ea.

Boil or steam the vegetables until they are tender. Drain well, set aside.

Cook the bacon in an ovenproof nonstick or cast-iron skillet over low heat until crisp, 2-3 minutes. Using a slotted spoon, transfer the bacon bits to paper towels to drain, then reserve. Add vegetable oil to the bacon fat in the pan if needed to make 2 tablespoons.

Raise the heat to medium-low and add the onion. Cook slowly, stirring occasionally, until translucent, 8-10 minutes. Add the vegetables and sauté until lightly browned, 8-10 minutes



more. Meanwhile, beat the eggs until blended and season with 1/2 teaspoon salt and 1/4 teaspoon pepper. Pour them over the ingredients in the skillet, and add the crisp bacon bits to the mixture, stirring gently.

Preheat the broiler. Reduce the heat to low, cover the skillet, and cook until the eggs are nearly set, 6-8 minutes. Remove the cover and place the skillet under the broiler to brown the eggs lightly, about 3 minutes, while watching carefully. Cut into wedges and serve at once.

*Recipes courtesy of The Viking Life (www.thevikinglife.com).*

## Pear Galettes with Flaky Almond Crust

Yield: 6-8 servings



### Ingredients:

Slivered almond	1/2 cup
All-purpose flour	1 cup, plus more for rolling
Sugar	1 tbsp.
Kosher salt	1/2 tsp.
Bartlette pears, ripe but firm	4 each
Butter	3 tbsp.
Brown sugar, lightly packed	4 tbsp.
Nutmeg, grated	1/4 tsp.

To make the crust, place the slivered almonds, flour, sugar and salt in the bowl of a food processor fitted with the metal chopping blade. Pulse the processor 10 times to mix well. Add the cubed butter and pulse repeatedly until the butter is pea-sized or smaller. Add the water while pulsing the processor 10 to 12 more times (the dough will resemble coarse meal). Turn out the dough onto a

length of plastic wrap and press firmly into a 6-inch disk. Wrap and refrigerate the dough for at least 1 hour before rolling.

While the dough is chilling, peel the pears and cut them in half. Use a melon baller or teaspoon measure to scoop out the seeds and the stem. Slice the pears into half moons, about 1/8-inch thick. Heat the butter in a large heavy skillet over a medium burner. When the butter has melted, add the sliced pears and sugar. Cook over medium heat for five to seven minutes, stirring occasionally or until the pears have released their liquid and most of the liquid has cooked away. Turn the sliced pears out onto a baking sheet to cool to room temperature.

Preheat an oven to 350°F. Remove the dough from the refrigerator. Roll the dough out into a circle about 14 inches in diameter, flouring as necessary. Next, use a large plate or pan lid and a paring knife to trim the circle to about 13 inches. Place the dough on a parchment-lined baking sheet.

Starting about one inch from the edge of the dough, arrange the largest slices of pear in a shingled circle, with the curved edge facing outward. Continue to overlap the slices, gradually working your way into the center of the circle with the smallest slices of pear. To finish the galette, fold the outer edge over to double its width, and finish by pinching at regular intervals, or by crimping lightly with a fork to make a decorative pattern.

Bake the galette in the center of the oven for 40 minutes or until the dough is golden around the edges. Remove the galette from the oven and allow it to cool completely before slicing and serving. Serve with sweetened whipped cream or crème fraîche.